UNITED STATES PATENT AND TRADEMARK OFFICE

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER
TRAN, TUYETLIEN T

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/684,580	FITZMAURICE, GEORGE WILLIAM
	Examiner	Art Unit
	TUYETLIEN T. TRAN	2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 August 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-56* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-30 and 32-56* is/are rejected.

7)☒ Claim(s) *5 and 31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the following communication: Appeal Brief filed 08/11/09.

This action is made non-final.

2.   Claims 1-56 are pending in the case. Claims 1, 25, 28, 31, 32, 44-54 are independent

claims.

3.   In view of the appeal brief filed on 08/11/09, PROSECUTION IS HEREBY REOPENED.

A new ground of rejection is set forth below.

       To avoid abandonment of the application, appellant must exercise one of the following

two options:

       (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37

CFR 1.113 (if this Office action is final); or,

       (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an

appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee

can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have

been increased since they were previously paid, then appellant must pay the difference

between the increased fees and the amount previously paid.

       A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing

below.

Claim Objections

❑   Claim 1 is objected to because it is not clear whether the term "the boundary" in lines 6,

       7 is referring to "a menu boundary" or "a region boundary". Claim 1 is further objected to

       because of informalities: it is suggested that the term "the region" in lines 6, 8 should be

       changed to "the mobile tracking region"; the term "the display" should be changed to "the

       graphical user interface display" to be consistent with the claim language.

- ❑ Claims 2-24 are objected to because of informalities: it is suggested that the term "An interface display" should be changed to "A graphical user interface display".

- ❑ Claim 2 is further objected to because of informalities: it is suggested that the term "the region" should be changed to "the mobile tracking region" to be consistent with the claim language. It is further not clear whether the term "a menu" in line 2 is the same as "a menu" in line 4 of claim 1.

- ❑ Claim 3 is further objected to because of informalities: it is suggested that the term "the region" should be changed to "the mobile tracking region" to be consistent with the claim language. It is further not clear whether the term "a menu" in line 2 is the same as "a menu" in line 4 of claim 1.

- ❑ Claim 4 is further objected to because of informalities: the term "the controls of the interface" lacks antecedent basis.

- ❑ Claim 5 is further objected to because of informalities: it is suggested that the term "the region" should be changed to "the mobile tracking region" to be consistent with the claim language.

- ❑ Claim 7 is further objected to because of informalities: it is suggested that the term "a selected function" should be changed to "the selected function" to be consistent with the claim language.

- ❑ Claim 8 is further objected to because of informalities: it is suggested that the term "the transducer" should be changed to "the input transducer"; the term "region" should be changed to "the mobile tracking region"; the term "the tablet" should be changed to "the tablet display" to be consistent with the claim language.

❑ Claim 9 is further objected to because of informalities: the term "the stylus" recited in line

2 lacks the antecedent basis. (note: the term "a stylus" is recited in claim 8, but claim 9 is

dependent on claim 6).

❑ Claim 10 is further objected to because of informalities: it is suggested that the term "the

transducer" should be changed to "the input transducer"; the term "region" should be

changed to "the mobile tracking region" to be consistent with the claim language.

❑ Claim 11 is further objected to because of informalities: it is suggested that the term "the

region" should be changed to "the mobile tracking region"; the term "the condition"

should be changed to "the predetermined condition" to be consistent with the claim

language.

❑ Claim 12 is further objected to because of informalities: the terms "the repositioning

positions" and "the prior position" lack the antecedent basis.

❑ Claim 14 is further objected to because it is not clear whether the term "the boundary" is

referring to "a menu boundary" or "a region boundary" of claim 1. It is further objected to

because of the terms "the symbol", which is suggested to change to "the tracking

symbol".

❑ Claim 15 is further objected to because it is not clear whether the terms "the boundary"

is referring to "a menu boundary" or "a region boundary" of claim 1. It is further objected

to because of the terms "the symbol", which is suggested to change to "the tracking

symbol".

❑ Claim 16 is further objected to because it is not clear whether the term "the boundary" is

referring to "a menu boundary" or "a region boundary" of claim 1. It is further objected to

because of the terms "the region" and "the symbol", which are suggested to change to

"the mobile tracking region" and "the tracking symbol", respectively.

❏ Claims 17 and 18 are further objected to because of informalities: the term "the interface" lacks the antecedent basis.

❏ Claim 19 is further objected to because of formalities: It is suggested that the term "the symbol" should be changed to "the tracking symbol" to be consistent with the claim language.

❏ Claim 20 is further objected to because of informalities: it is suggested that the term "the region" should be changed to "the mobile tracking region" to be consistent with the claim language.

❏ Claim 22 is further objected to because of informalities: the term "the interface" lacks the antecedent basis. Claim 22 is further objected to because it is not clear whether the term "the boundary" is referring to "a menu boundary" or "a region boundary" of claim 1

❏ Claim 25 is objected to because of informalities: the term "the user" in line 2 lacks the antecedent basis.

❏ Claim 28 is objected to because of informalities: the terms "the edge of the boundary" in line 8 and "the edge" in line 9 lack the antecedent basis. Claim 28 is further objected because the terms "the menu" in lines 4, 5, 8, 9 should be changed to "the tracking menu" to be consistent with the claim language.

❏ Claim 29 is objected because the term "the menu" should be changed to "the tracking menu" to be consistent with the claim language.

❏ Claim 30 is objected because of informalities: the term "tracking symbol" should be changed to "the tracking symbol"; the term "the menu" should be changed to "the tracking menu" to be consistent with the claim language.

❏ Claim 31 is objected to because of informalities:

- o the terms "the prior position" and "the condition" in line 19, the term "the interface" in lines 21, 22, the term "the mobile tracking region" in lines 21, 24 lack the antecedent basis.

- o It is not clear whether the term "a persistent" in lines 24, 25 is referring to "a persistent" object in line 22.

- o the term "the boundary" in lines 5, 7 should be changed to "the region boundary"; the term "the region" in line 5 should be changed to "the mobile tracking menu region"; the term "the display" in line 4 should be changed to "the graphical user interface display"; the term "the menu region" in lines 7, 8, 10, 18 should be changed to "the mobile tracking menu region"; the term "the controls" in lines 9, 12-14 should be changed to "the button controls"; the term "region" inline 15 should be changed to "the mobile tracking menu region"; the term "the tablet" in lines 16, 18 should be changed to "the tablet display" to be consistent with the claim language. (note: the term "the boundary" appears twice in line 7).

- ❑ Claim 32 is objected because of informalities: the term "symbol" in lines 3, 4 should be changed to "the tracking symbol"; the term<u>s</u> "the menu" in line 4 should be changed to "the tracking menu" to be consistent with the claim language.

- ❑ Claim 33 is objected because of informalities: the term "a user" should be changed to "the user" to be consistent with the claim language.

- ❑ Claim 34 is objected because of informalities: the term "the tablet" in line 3 should be changed to "the stylus sensing tablet" to be consistent with the claim language.

- ❑ Claim 35 is objected because of informalities: the term "the tablet" in line 2 should be changed to "the stylus sensing tablet" to be consistent with the claim language.

❑ Claim 36 is objected because of informalities: the term "the menu" in line 2 should be
changed to "the tracking menu" to be consistent with the claim language.

❑ Claim 37 is objected because of informalities: the term "the function" in line 1 should be
changed to "the graphic function" to be consistent with the claim language.

❑ Claim 39 is objected because of informalities: the term "the tablet" in line 4 should be
changed to "the stylus sensing tablet" to be consistent with the claim language.

❑ Claim 40 is objected because of informalities: the term "the menu" in lines 2, 3 should be
changed to "the tracking menu"; the term "the edge" in line 2 should be changed to "the
edge of the tracking menu" to be consistent with the claim language.

❑ Claim 41 is objected because of informalities: the term "the menu" in line 1 should be
changed to "the tracking menu"; the term "the symbol" in line 2 should be changed to
"the tracking symbol" to be consistent with the claim language.

❑ Claims 42 and 43 are objected because of informalities: the term "the menu" in line 2
should be changed to "the tracking menu"; the term "the symbol" in line 2 should be
changed to "the tracking symbol" to be consistent with the claim language.

❑ Claim 46 is objected because of informalities: the term "the transducer" in lines 4, 5
should be changed to "the position transducer" to be consistent with the claim language.

❑ Claim 47 is objected because of informalities: the terms "the symbol" in line 3 should be
changed to "the tracking symbol"; the term "the menu" in lines 3, 4, 5 should be changed
to "the tracking menu" be consistent with the claim language.

❑ Claim 48 is objected to because of informalities: the term "the user" in line 2 lacks the
antecedent basis.

❑ Claim 49 is objected to because of informalities:

- o It is not clear whether the term "<u>that</u> has a display function" in line 3 referring to <u>what</u> has a display function.

- o the term "the area" in lines 3, 4, 5 should be changed to "the display area"; the term "the boundary" in line 5 should be changed to "the boundary of the area" to be consistent with the claim language. (note: the term "the area" appears twice in line 4).

- ❑ Claim 50 is objected to because of informalities: the term "the display" in line 5 should be changed to "the graphical user interface display"; the term "the boundary" in lines 6, 8 should be changed to "the region boundary"; the term "the region" in lines 7-8 should be changed to "the mobile tracking region" to be consistent with the claim language.

- ❑ Claim 51 is objected to because of informalities: the term "the display" in line 4 should be changed to "the graphical user interface display"; the term "the boundary" in lines 5-6 should be changed to "the region boundary"; the term "the region" in lines 5, 7 should be changed to "the mobile tracking region" to be consistent with the claim language.

- ❑ Claim 52 is objected to because of informalities: the term "the display" in line 5 should be changed to "the graphical user interface display" to be consistent with the claim language. The term "the region" in line 7 lacks the antecedent basis.

- ❑ Claim 53 is objected to because of informalities: the term "the display" in lines 2, 4 should be changed to "the graphical user interface display"; the term "the region" in lines 6, 8 should be changed to "the mobile tracking region" to be consistent with the claim language. It is not clear whether the term "the boundary" in lines 6, 7 is referring to "a menu boundary" or "a region boundary"

- ❑ Claim 54 is objected to because of informalities: the term "the display" in lines 2, 4 should be changed to "the graphical user interface display"; the term "the region" in lines

6, 8 should be changed to "the mobile tracking region" to be consistent with the claim

language. It is not clear whether the term "the boundary" in lines 6, 7 is referring to "a

menu boundary" or "a region boundary"

❑ Claims 55-56 are objected to because of informalities: it is suggested that the term "An

interface display" should be changed to "A graphical user interface display".

❑ Claim 55 is further objected to because of informalities: the term "the region" in line 2

should be changed to "the mobile tracking region" to be consistent with the claim

language.

❑ Claim 56 is further objected to because of informalities: the term "the display" in line 2

should be changed to "the graphical user interface display" to be consistent with the

claim language.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public
use or on sale in this country, more than one year prior to the date of application for patent in the United
States.

5.   **Claims 1-7, 25-28, 32-33, 44-54 are rejected under 35 U.S.C. 102(b) as being**

anticipated by Allen et al. (Pat. No. 5500936; hereinafter Allen).

        As to claims 1, 50, 51, 53, 54, Allen teaches:

A graphical user interface display (e.g., see Fig. 1), comprising:

a tracking symbol positioned corresponding to an input transducer movable by a user

(e.g., see col. 3 lines 21-25; cursor symbol that is movable by the input device); and

a menu, on the display, having a menu boundary (e.g., see Fig. 2 and col. 3 lines 21-25;

a movable, enhanced, tracked, pop-up menu with boundary) and comprising a mobile tracking

region second having a region boundary coincident with the menu boundary (e.g., see Fig. 2,

col. 5 lines 35-56, col. 6 lines 15-25; the menu may be moved around, menu boundary also acts

as mobile tracking region) and enclosing the tracking symbol with the tracking symbol being

movable within the boundary (e.g., see col. 6 lines 15-30), the region moving in correspondence

to the tracking symbol when the tracking symbol encounters the boundary while moving (e.g.,

see Fig. 2, col. 5 lines 35-56, col. 6 lines 15-25; the menu may be moved around in

correspondence with the cursor including position the cursor encounters an edge of the menu),

the region having controls with boundaries and activatable when the tracking symbol

corresponds to the controls (e.g., see col. 6 lines 15-30) and the menu is always visible when

one of the selectable objects is not activated and always not visible when one of the selectable

objects is activated (e.g., see col. 6 lines 26-30; when activated the tracked menu is always

displayed until clicking a button – dismisses the menu).

As to claim 2, Allen teaches wherein the region comprises a menu having visible menu

edge (e.g., see Fig. 2).

As to claim 3, Allen teaches the region comprises one of a linear menu, a menu with an

embedded marking menu, a tool palette, a color palette, a pan-zoom tool, a pen-mouse, a

keyboard, a numeric pad, one or more buttons, sliders, checkboxes, pull-down menu, a dialog

box, and an alternative view (e.g., see Fig. 2).

As to claim 4, Allen teaches wherein the controls of the interface further comprise a

control changed in appearance when the tracking symbol is over the control and is active (e.g.,

see col. 6 lines 39-46).

As to claim 6, Allen teaches the tracking symbol can be activated by the user and

performs a selected function when active (e.g., see col. 3 lines 21-25 and col. 6 lines 39-46).

As to claim 7, Allen teaches wherein a selected function is performed when the tracking

symbol is active (e.g., see col. 3 lines 21-25 and col. 6 lines 39-46).

As to claims 25, 46, 48, Allen teaches:

An interface display (e.g., see Fig. 1), comprising:

a first tracking symbol having a first tracking symbol position controllable by the user

(e.g., see col. 3 lines 21-25; cursor symbol that is movable by the input device); and

a second tracking symbol containing the first tracking symbol (e.g., see Fig. 2 and col. 3

lines 21-25; a movable, enhanced, tracked, pop-up menu), having a second tracking symbol

position controlled by the first tracking symbol (e.g., see col. 3 lines 21-25 and lines 50-56; the

movable, enhanced, tracked, pop-up menu displayed at the location of the cursor) and having

objects selectable by the first tracking symbol (e.g., see Fig. 2; buttons), the second tracking

symbol having a menu containing the selectable objects with the menu having a menu boundary

(e.g., see Fig. 2 and col. 3 lines 21-25, lines 51-56, col. 5 lines 34-46; movable, enhanced,

tracked, pop-up menu with boundary shown in Fig. 2) and comprising a mobile tracking region

having a region boundary coincident with the menu boundary (e.g., see Fig. 2, col. 5 lines 35-

56, col. 6 lines 15-25; the menu may be moved around, menu boundary also acts as mobile

tracking region), and the menu is always visible when one of the selectable objects is not

activated and always not visible when one of the selectable objects is activated (e.g., see col. 6

lines 26-30; when activated the tracked menu is always displayed until clicking a button –

dismisses the menu).

As to claim 26, Allen further teaches wherein the first and second tracking symbol

positions correspond (e.g., see col. 3 lines 21-25 and lines 50-56; the movable, enhanced,

tracked, pop-up menu displayed at the location of the cursor).

As to claim 27, Allen further teaches wherein the objects comprise controls (i.e., see

Fig. 2).

As to claims 28, 47, 52, Allen teaches:

An interface (e.g., see Fig. 1), comprising:

a display (e.g., see Fig. 1)

a tracking menu positioned on the display, having an edge and having controls

positioned in the menu with the menu having a menu boundary (e.g., see Fig. 2 and col. 3 lines

21-25; a movable, enhanced, tracked, pop-up menu) and comprising a mobile tracking region

having a region boundary coincident with the menu boundary (e.g., see Fig. 2, col. 5 lines 35-

56, col. 6 lines 15-25; the menu may be moved around, menu boundary also acts as mobile

tracking region), and the menu is always visible when one of the selectable objects is not

activated and always not visible when one of the selectable objects is activated (e.g., see col. 6

lines 26-30; when activated the tracked menu is always displayed until clicking a button --

dismisses the menu);

a tracking symbol positioned above the menu (e.g., see Figs. 2, 3), encountering the

edge of the boundary when moved and moving the menu when the edge is encountered (e.g.,

see Fig. 2, col. 5 lines 35-56, col. 6 lines 15-25; the menu may be moved around in

correspondence with the cursor including a position where the cursor encounters an edge of the

menu).

As to claim 32, Allen teaches:

A method (e.g., see Fig. 1), comprising:

allowing a user to move a tracking symbol on a display (e.g., see col. 3 lines 21-25; cursor symbol that is movable by the input device); and

moving a tracking menu having controls in correspondence to the symbol when the symbol encounters an edge of the menu (e.g., see Fig. 2, col. 5 lines 35-56, col. 6 lines 15-25; the menu may be moved around in correspondence with the cursor including position where the cursor encounters an edge of the menu) with the menu always being visible when one of the controls is not activated and always being not visible when one of the controls is activated (e.g., see col. 6 lines 26-30; when activated the tracked menu is always displayed until clicking a button -- dismisses the menu).

As to claim 33, Allen teaches allowing a user to select an item in the tracking menu without moving the tracking menu (e.g., see col. 6 lines 26-30).

As to claim 44, Allen teaches:

A method, comprising

moving a first tracking symbol responsive to movement of a second tracking symbol (e.g., see col. 6 lines 15-25; the tracked menu can be moved around using the cursor),

the first tracking symbol having a menu containing selectable objects with the menu having a menu boundary (e.g., see Fig. 2 and col. 3 lines 21-25, lines 51-56, col. 5 lines 34-46; movable, enhanced, tracked, pop-up menu with boundary shown in Fig. 2) and comprising a mobile tracking region having a region boundary coincident with the menu boundary (e.g., see Fig. 2, col. 5 lines 35-56, col. 6 lines 15-25; the menu may be moved around, menu boundary

also acts as mobile tracking region) and moving the second tracking symbol responsive to an

input transducer (e.g., see col. 3 lines 21-25; cursor symbol that is movable by the input device),

and the menu is always visible when one of the selectable objects is not activated and always

not visible when one of the selectable objects is activated (e.g., see col. 6 lines 26-30; when

activated the tracked menu is always displayed until clicking a button – dismisses the menu).

As to claim 45, Allen teaches:

A method, comprising

using a single cursor movement to both move and activate a mobile control (e.g., see

col. 3 lines 21-25, lines 46-56; clicking on the mouse button to activate the movable enhanced

tracked pop-up menu at the position of the cursor, therefore, the menu is moved and activated

with a single cursor movement), the mobile control having a menu containing selectable objects

with the menu having a menu boundary (e.g., see Fig. 2 and col. 3 lines 21-25, lines 51-56, col.

5 lines 34-46; movable, enhanced, tracked, pop-up menu with boundary shown in Fig. 2) and

comprising a mobile tracking region having a region boundary coincident with the menu

boundary (e.g., see Fig. 2, col. 5 lines 35-56, col. 6 lines 15-25; the menu may be moved

around, menu boundary also acts as mobile tracking region), and the menu is always visible

when one of the selectable objects is not selected and always not visible when one of the

selectable objects is selected (e.g., see col. 6 lines 26-30; when activated the tracked menu is

always displayed until clicking a button – dismisses the menu).

As to claim 49, Claim 44 is rejected along similar rationale as applied to claim 1;

including the following: Allen teaches:

a display area that tracks a cursor tool when the cursor tool reaches a boundary of the

area and that has a display function (e.g., see Fig. 2, col. 5 lines 35-56, col. 6 lines 15-25; the

menu may be moved around in correspondence with the cursor including position the cursor

encounters an edge of the menu) and a display area have a menu containing selectable objects

with the menu having a menu boundary (e.g., see Fig. 2 and col. 3 lines 21-25; a movable,

enhanced, tracked, pop-up menu with boundary).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived by
> the manner in which the invention was made.

7.   **Claims 1-4, 6-7, 10-12, 14-15, 20-23, 25-29, 32-33, 44, 46-55 are rejected under 35**

U.S.C. 103(a) as being unpatentable over Leavitt et al. (US 2002/0085037 A1; hereinafter

Leavitt) in view of Schnarel, Jr. et al. (Pat. No. 4720703; hereinafter Schnarel).

        As to claims 1, 50, 51, 53, 54, Leavitt teaches:

        A graphical user interface display (e.g., Figs. 5, 6 and [0005], [0071], [0077]),

comprising:

        a tracking symbol positioned corresponding to an input transducer movable by a user

(e.g., see [0053], [0054]; cursor that is movable by input device by a user);

and

        a menu, on the display, having a menu boundary (e.g., see Fig. 2A and [0061]; user

definable interface - UDI - with boundary as shown in Fig. 2A) and comprising a mobile tracking

region (e.g., see [0061]; the UDI is displayed in a relative position about the cursor position to

substantially reduce cursor commute) enclosing the tracking symbol with the tracking symbol being movable within the boundary (e.g., the cursor is movable within the UDI boundary to activate a button as shown in Figs. 2A, 4), the region moving in correspondence to the tracking symbol (e.g., see [0016], [0061]; the UDI is displayed in a relative position about the cursor position to substantially reduce cursor commute), the region having controls with boundaries and activatable when the tracking symbol corresponds to the controls (e.g., see Figs. 2A, 4 and [0016]; plurality of buttons), and the menu is always visible when one of the controls is not activated and always not visible when one of the controls is activated (e.g., see [0030]; once activated the UDI is visible and disappear once a selection is made).

While Leavitt discloses that the user definable interface is displayed in a relative position about the cursor position to substantially reduce cursor commute (e.g., see [0061]), Leavitt does not expressly disclose that the mobile tracking region having a region boundary coincident with the menu boundary and the region moving in correspondence to the tracking symbol when the tracking symbol encounters the boundary while moving.

In the same field of endeavor of graphic display, Schnarel teaches a mobile tracking region having a region boundary coincident with a window boundary and the region moving in correspondence to the tracking symbol when the tracking symbol encounters the boundary while moving (e.g., see Fig. 1b, Abstract and col. 4 lines 19-28; the viewport or window is moved with the cursor where the cursor is moved by the mouse to encounter one of the edges of the window or viewpoint).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to have modified the cursor based graphical user interface of Leavitt to include the feature of moving the window in correspondence to the cursor when the cursor encounters the boundary when moving as taught by Schnarel to achieve the claimed invention.

One would be motivated to implement this feature is to provide a user with a visual cue as to what the tracking boundary is so that the user may use the tracking menu more efficiently.

As to claims 25, 46, 48, Leavitt teaches:

An interface display (e.g., Figs. 5, 6 and [0005], [0071], [0077]), comprising:

a first tracking symbol having a first tracking symbol position controllable by the user (e.g., see [0053], [0054]; cursor that is movable by input device by a user); and

a second tracking symbol containing the first tracking symbol (e.g., see Fig. 2A and [0061]; cursor based user definable interface - UDI - with boundary as shown in Fig. 2A), having a second tracking symbol position controlled by the first tracking symbol (e.g., see [0061]; the UDI is displayed in a relative position about the cursor position) and having objects selectable by the first tracking symbol, the second tracking symbol having a menu containing the selectable objects with the menu having a menu boundary (e.g., see Fig. 2 and [0061]; the UDI having selectable buttons) and comprising a mobile tracking region (e.g., the cursor is movable within the UDI boundary to activate a button as shown in Figs. 2A, 4), the menu is always visible when one of the selectable objects is not activated and always not visible when one of the selectable objects is activated (e.g., see [0030]; once activated the UDI is visible and disappear once a selection is made).

While Leavitt discloses that the user definable interface is displayed in a relative position about the cursor position to substantially reduce cursor commute (e.g., see [0061]), Leavitt does not expressly disclose that the mobile tracking region having a region boundary coincident with the menu boundary. However, this deficiency is disclosed by Schnarel as set forth in the foregoing rejection of claim 1. Therefore, combining Schnarel and Leavitt would meet the claimed limitations for the same reasons as set forth in claim 1.

As to claims 28, 32, Claims 28, 32 are rejected along similar rationale as applied to claim 1 including the following:

Leavitt teaches the tracking menu having an edge (e.g., see Fig. 2A and [0061]; user definable interface - UDI – an edge as shown in Fig. 2A) and the tracking symbol positioned above the menu (e.g., see Fig. 2C). Therefore, combining Schnarel and Leavitt would meet the claimed limitations for the same reasons as set forth in claim 1.

As to claim 44, Claim 44 is rejected along similar rationale as applied to claim 25; including the following: Leavitt teaches moving the first tracking symbol responsive to movement of a second tracking symbol (e.g., see [0061]; the UDI is displayed in a relative position about the cursor position to substantially reduce cursor commute); wherein moving the second tracking symbol responsive to an input transducer (e.g., see [0053], [0054]; cursor that is movable by input device by a user). Therefore, combining Schnarel and Leavitt would meet the claimed limitations for the same reasons as set forth in claim 1.

As to claims 47, 52, Claims 47 and 52 are rejected along similar rationale as applied to claim 1; including the following: Leavitt teaches moving a tracking menu in correspondence to the symbol (e.g., see [0061]; the UDI is displayed in a relative position about the cursor position to substantially reduce cursor commute). Schnarel teaches window is moving in correspondence to the tracking symbol when the tracking symbol encounters the edge of the window (e.g., see Fig. 1b, Abstract and col. 4 lines 19-28; the viewport or window is moved with the cursor where the cursor is moved by the mouse to encounter one of the edges of the window or viewpoint). Therefore, combining Schnarel and Leavitt would meet the claimed limitations for the same reasons as set forth in claim 1.

As to claim 49, Claim 44 is rejected along similar rationale as applied to claim 1;

including the following: Leavitt teaches a display area have a menu containing selectable

objects with the menu having a menu boundary (e.g., see [0061]; the UDI is displayed in a

relative position about the cursor position to substantially reduce cursor commute).

Schnarel teaches a display area that tracks a cursor tool when the cursor tool reaches a

boundary of the area and that has a display function (e.g., see Fig. 1b, Abstract and col. 4 lines

19-28; the viewport or window is moved with the cursor where the cursor is moved by the

mouse to encounter one of the edges of the window or viewpoint). Therefore, combining

Schnarel and Leavitt would meet the claimed limitations for the same reasons as set forth in

claim 1.

As to claim 2, Leavitt teaches wherein the region comprises a menu having visible

menu edge (e.g., see Fig. 2A and [0061]).

As to claim 3, Leavitt teaches the region comprises one of a linear menu, a menu with

an embedded marking menu, a tool palette, a color palette, a pan-zoom tool, a pen-mouse, a

keyboard, a numeric pad, one or more buttons, sliders, checkboxes, pull-down menu, a dialog

box, and an alternative view (e.g., see Fig. 2A and [0061]).

As to claim 4, Leavitt teaches wherein the controls of the interface further comprise a

control changed in appearance when the tracking symbol is over the control and is active (e.g.,

see Fig. 2C).

As to claim 6, Leavitt teaches the tracking symbol can be activated by the user and

performs a selected function when active (e.g., see [0052]-[0054], [0016], [0061]).

As to claim 7, Leavitt teaches wherein a selected function is performed when the tracking symbol is active (e.g., see [0052]-[0054], [0016], [0061]).

As to claim 10, Leavitt further teaches wherein the transducer corresponds to a mouse having a mouse button (i.e., see [0056]), the tracking symbol and the menu are displayed on a tablet display (e.g., see [0071], [0077]; can be handheld device such as wireless telephones) and the tracking symbol is activated when the mouse is one of moved and activated (e.g., [0051]-[0053]; the input device needs to be activated/powered on to effect an input).

As to claim 11, Leavitt teaches wherein the positioning corresponding to the motion of the input transducer stops under a predetermined condition (e.g., see [0051]-[0053]; the input device needs to be activated/powered on to effect an input), and the region is repositioned corresponding to the tracking symbol when the condition no longer exists (e.g., see [0061]; the UDI is displayed in a relative position about the cursor position to substantially reduce cursor commute).

As to claim 12, Leavitt teaches the repositioning positions the menu a least Euclidean distance from the prior position (e.g., see [0061]; the UDI is displayed in a relative position about the cursor position to substantially reduce cursor commute).

As to claim 14, Schnarel further teaches wherein the boundary is maintained around the symbol (e.g., see Fig. 1b, Abstract and col. 4 lines 19-28; the viewport or window is moved with the cursor where the cursor is moved by the mouse to encounter one of the edges of the window or viewpoint). Thus combining Leavitt and Schnarel would meet the claimed limitation for the same reasons as discussed with respect to claim 1 above.

As to claim 15, Schnarel further teaches wherein the symbol is allowed to cross the boundary while moving and the boundary surrounds the symbol when the symbol is not moving (e.g., see Fig. 1b, Abstract and col. 4 lines 19-28). Thus combining Leavitt and Schnarel would meet the claimed limitation for the same reasons as discussed with respect to claim 1 above.

As to claim 20, Schnarel further teaches comprising an interior tracking boundary interior to the region boundary and the region moving in correspondence to the tracking symbol when the tracking symbol encounters the interior tracking boundary (e.g., see Fig. 1b, Abstract and col. 4 lines 19-28; the viewport or window is moved with the cursor where the cursor is moved by the mouse to encounter one of the edges of the window or viewpoint). Thus combining Leavitt and Schnarel would meet the claimed limitation for the same reasons as discussed with respect to claim 1 above.

As to claim 21, Schnarel further teaches wherein the interior tracking boundary comprises a jutting wall (i.e., see Fig. 1b; boundary 56). Thus combining Leavitt and Schnarel would meet the claimed limitation for the same reasons as discussed with respect to claim 1 above.

As to claim 22, Schnarel further teaches wherein the interface has a visible edge and the boundary corresponds to one of the visible edge, outside the visible edge, inside the visible edge and overlaps the visible edge (i.e., see Fig. 1b; boundary 56). Thus combining Leavitt and Schnarel would meet the claimed limitation for the same reasons as discussed with respect to claim 1 above.

As to claim 23, Leavitt further teaches wherein control activation requires a dwell by the tracking symbol (i.e., see [0051]).

As to claim 26, Leavitt further teaches wherein the first and second tracking symbol positions correspond (e.g., see [0016], [0061]).

As to claim 27, Allen further teaches wherein the objects comprise controls (i.e., see Fig. 2A).

As to claim 29, Leavitt further teaches a graphic object positioned between the menu and the display (i.e., see Fig. 3B).

As to claim 33, Leavitt further teaches comprising allowing a user to select an item in the tracking menu without moving the tracking menu (e.g., see [0016], [0061]).

As to claim 55, Leavitt further teaches a menu region moves in correspondence to the tracking symbol without activating a selection button on the input transducer (e.g., see [0016], [0061]).

8.   **Claims 8-13, 24, 34, 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leavitt in view of Schnarel further in view of Iwema et al (Patent No US 7,058,902 B2; hereinafter Iwema).**

As to claim 8, Leavitt and Schnarel teach the limitations of claim 6 for the same reasons as set forth above. While Leavitt discloses that the tracking menu can be implemented on any apparatus having a display device for user interaction (e.g., see [0071]), Leavitt and Schnarel do not teach the transducer corresponds to a stylus, the tracking symbol and region are displayed on a tablet display, and the tracking symbol is activated when the stylus touches the tablet.

In the same field of endeavor of graphics display, Iwema teaches a contextual menu that can be activated and controllable by a stylus on a tablet; wherein Iwema teaches the tracking symbol is activated when the stylus touches the tablet (i.e., the stylus 204 is pressured upon the display screen to effect input, see col. 7, lines 11-15).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to have used the tracking menu of Leavitt and Schnarel to the tablet display with stylus device of Iwema to achieve the claimed invention. One would be motivated to make such a combination is to enable the user to use the tracking menu on a tablet device with stylus.

As to claim 9, Iwema further teaches wherein the tracking symbol is inactive when the stylus is not touching the tablet (i.e., the stylus 204 is pressured upon the display screen to effect input, see col. 7, lines 11-15; therefore, the tracking symbol is inactive when the stylus is not pressured upon the display screen). Thus, combining Leavitt, Schnarel and Iwema would meet the claimed limitations for the same reasons as set forth in claim 8.

As to claim 10, claim 10 is alternatively rejected under similar rationale as set forth in claim 8.

As to claims 11, 34, 38, 39, Iwema teaches wherein the positioning corresponding to the motion of the input transducer stops under a predetermined condition (e.g., see col. 7 lines 11-36; stylus need to be in certain distance or touch the table to effect input); Iwema teaches the region is repositioned corresponding to the tracking symbol when the condition no longer exists (e.g., see col. 8 lines 25-35). Thus, combining Leavitt, Schnarel and Iwema would meet the claimed limitations for the same reasons as set forth in claim 8.

As to claim 12, Leavitt teaches the repositioning positions the menu a least Euclidean

distance from the prior position (e.g., see [0061]; the UDI is displayed in a relative position about

the cursor position to substantially reduce cursor commute).

As to claim 13, Iwema teaches the predetermined condition is a stylus out-of-range

condition (e.g., see col. 7 lines 11-36; stylus need to be in certain distance or touch the table to

effect input). Thus, combining Leavitt, Schnarel and Iwema would meet the claimed limitations

for the same reasons as set forth in claim 8.

As to claim 24, Iwema further teaches control functionality is context sensitive (e.g., see

Fig. 3). Thus, combining Leavitt, Schnarel and Iwema would meet the claimed limitations for the

same reasons as set forth in claim 8.

9.   Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Leavitt, Schnarel and Iwema as applied to claim 34 and further in view of Beaton et al.

(Patent No. 6037937; hereinafter Beaton).

As to claim 35, Leavitt, Schnarel and Iwema teach the limitations of claim 34 for the

same reasons as discussed above. Iwema teaches a tracking symbol wherein the tracking

symbol is activated when the stylus touches the tablet or hover over the tablet without actually

touching the tablet (i.e., see col. 7, lines 11-36). However, Leavitt, Schnarel and Iwema do not

explicitly teach that making the tracking menu transparent when the stylus touches the tablet.

Beaton, though, teaches a graphical navigation menu for electronic devices; wherein the

electronic devices comprise electronic organizers, PDA, graphical display-based phones or any

other computer devices (e.g., see col. 3 lines 22-32 and Abstract). Beaton teaches the

graphical navigation menu can be activate by touching the display at the center of the

navigation tool for a predetermined time period (e.g., see col. 5 lines 14-27). Beaton teaches

the activated navigation tool is preferably transparent (e.g., see col. 5 lines 14-27). Beaton

discloses stylus device can be used to activate the navigation menu (e.g., see col. 5 lines 28-40

and col. 6 lines 36-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to have used the function of making the menu transparent as taught by

Beaton to the tracking menu as taught by Leavitt, Schnarel and Iwema to avoid hindering the

display of content information in the viewing area (e.g., see col. 5 lines 14-27).

As to claim 36, Beaton discloses performing a selected function when the menu is

transparent (e.g., see col. 5 lines 27-40). Strauss further discloses performing a graphic

function corresponding to motion of the stylus (e.g., performing a copying function when the

drag toolbar is transparent, see Fig. 1D). Thus, combining Leavitt, Schnarel, Iwema, and

Beaton would meet the claimed limitations for the same reasons set forth in claim 35 above.

As to claim 37, Iwema further teaches wherein the function is makes a mark on the

display (e.g., see Fig. 3). Thus, combining Leavitt, Schnarel, Iwema, and Beaton would meet the

claimed limitations for the same reasons set forth in claim 35 above.

10. **Claims 16 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

Leavitt and Schnarel as applied to claims 1 and 32 and further in view of Hoeber et al

(Patent No 5,276,795; hereinafter simply referred to as Hoeber).

As to claims 16 and 40, Leavitt and Schnarel teach the limitations of claims 1 and 32

for the same reasons as discussed above. However, Leavitt and Schnarel do not explicitly

teach that the user designates that the region or menu be held in place when the symbol

crosses the boundary.

Hoeber, though, discloses wherein the user designates that the region or menu be held

in place when the symbol crosses the boundary (e.g., the user using the pushpin button 150 to

keep the region or menu on the display, see Fig. 4a).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to have used the function of pushpin button as taught by Hoeber to the

tracking menu as taught by Leavitt and Schnarel to avoid the inefficient and time consuming

requirement of reselecting a particular menu button within a menu while allowing the users to

execute other operations (e.g., see Hoeber col. 7, lines 39-45).

11.   Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Leavitt, Schnarel and Hoeber as applied to claim 16 and further in view of Nicholas, III

(US 6865719 B1; hereinafter Nicholas).

As to claims 17, Leavitt, Schnarel and Hoeber teach the limitations of claim 16 for the

same reasons as discussed above. However, Leavitt, Schnarel and Hoeber do not explicitly

teach that the interface or menu comprises an outline of the mobile tracking region when the

tracking symbol is over a persistent object. Nicholas, though, teaches wherein the interface or

menu comprises an outline of the mobile tracking region when the tracking symbol is over a

persistent object (see Fig. 2A item 208c).

It would have been obvious to one of ordinary skill in the art at the time the invention was

made to have used the function of trailing message as taught by Nicholas to the tracking menu

as taught by Leavitt, Schnarel and Hoeber to improve the message display and thus enable a

user to conveniently receive and access data and related applications, and collaborate with

other users, without interfering with the operation of running applications or services (e.g., see

Nicholas col. 2, lines 25-35).

As to claim 18, Nicholas further discloses wherein the interface is clipped when the

tracking symbol exits the persistent object (see item 234 in Fig. 2C). Thus combining Leavitt,

Schnarel, Hoeber and Nicholas would meet the claimed limitations for the same reasons as

discussed with respect to claim 17 above.

12.   Claims 19, 30, 41-43, 56 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Leavitt, Schnarel as applied to claim 32 and further in view of Nicholas.

As to claim 41, claim 41 is rejected under similar rationale as claim 17 above.

As to claim 42, Nicholas further discloses converting the menu to a complete graphical

menu when the symbol exist the persistent object (see item 208g in Fig. 2C); and clipping a

portion of the complete graphical menu overlapping the persistent object (see item 234). Thus

combining Leavitt, Schnarel and Nicholas would meet the claimed limitations for the same

reasons as discussed with respect to claim 17 above.

As to claims 19, 43, 56, Nicholas further teaches wherein the mobile tracking region

deforms corresponding to a shape of a persistent object when the symbol comes in a vicinity of

a persistent object or display edge (e.g., see col. 8, lines 30-36 or Fig. 4A items 408d and

408e). Thus combining Leavitt, Schnarel and Nicholas would meet the claimed limitation for the

same reasons as discussed with respect to claim 17 above.

As to claim 30, Nicholas further teaches a persistent graphic object positioned between

tracking symbol and the menu (i.e., the hyperlink "click here for info" is positioned between the

cursor 202i and the item 234, see Fig. 2C). Thus combining Leavitt, Schnarel and Nicholas

would meet the claimed limitation for the same reasons as discussed with respect to claim 12

above.

Allowable Subject Matter

13.   Claims 5 and 31 would be allowable if rewritten to overcome the objections set forth in

this Office action and to include all of the limitations of the base claim and any intervening

claims.

Response to Arguments

14.   Applicant's arguments filed 8/11/09 have been fully considered but are moot in view of

new grounds of rejection.

Conclusion

The prior art made of record on form PTO-892 and not relied upon is considered

pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider

these references fully when responding to this action.

It is noted that any citation to specific, pages, columns, lines, or figures in the prior art
references and any interpretation of the references should not be considered to be limiting in
any way. A reference is relevant for all it contains and may be relied upon for all that it would
have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331,
1332-33,216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006,1009,
158 USPQ 275,277 (CCPA 1968)).

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to TuyetLien (Lien) T. Tran whose telephone number is 571-270-1033. The

examiner can normally be reached on Mon-Friday: 7:30 - 5:00, off on alternating Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. T. T./
Examiner, Art Unit 2179

/Weilun Lo/
Supervisory Patent Examiner, Art Unit 2179